

Appl. No. 10/065,169
Amdt dated February 6, 2004
Reply to Office Action of November 06, 2003

REMARKS AND ARGUMENTS

Status of the Application

Claims 1-17 are pending in the subject application. Claim 1-6 are rejected under 35 USC § 102. Claims 7-17 are objected as being dependent upon a rejected base claim. By way of this amendment, new claims 18-27 have been added.

Objection to the Specification

The Examiner has objected to the specification because the abstract contain the terms "comprising" and "disclosed". Applicants, in response, have amended the abstract to exclude the terms "comprising" and "disclosed". Applicants therefore submit that the objection to the specification has been traversed.

Objection to the Drawings

Figure 1 has been objected to by the Examiner. Specifically, Figure 1 should be designated by a legend "Prior Art" because only that which is old is illustrated. Applicants, in response, have amended Figure 1 as suggested by the Examiner. Applicants therefore submit that the objection to the drawings has been traversed.

Rejection under 35 USC §102

Claims 1-6 are rejected under 35 USC § 102(b) as being anticipated by Cowles et al. (US 6,269,035). Applicants respectfully disagree.

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Claim 1, as amended to more clearly define the invention, recites a redundancy unit which includes first and second fuse blocks coupled to a redundancy element. The first fuse block includes at least one first-type fuse while the second fuse block includes at least one second-type fuse. The redundancy element can be programmed by either the first or second fuse block.

Cowles et al. describes a multiplexed redundancy scheme in a memory device. The memory device includes memory cells divided into a plurality of memory sub-arrays that are arranged in rows and columns. Each sub-array includes a limited number of redundant row elements and redundant column elements. The redundant row elements are programmed by row fuses and redundant column elements are programmed by column fuses. *See Cowles et al.*, Fig. 1 and col. 4, lines 40-50. As such, a redundant element is coupled to only one fuse block (i.e., row redundant element coupled to row fuse and column redundant element coupled to column fuse). This is in contrast to the present invention wherein a redundant element is coupled to first and second fuse blocks, each containing a different type of fuse, to enable the redundant element to be programmed by either the first or second fuse block.

As for the other references of record not relied upon, Applicants submit the these references also failed to teach or suggest a redundancy unit have a redundancy element coupled to first and second fuse blocks to enable the redundancy element to be programmed by either one of the fuse blocks. Applicants therefore submit that claim 1 is patentable over the prior art of record, alone or in combination. Since claims 2-5 and new claims 18-22 are directly or indirectly dependent on claim 1 and new claims 23-27 contain similar limitations as claim 1, these claims are also patentable over the cited art of record.

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Objection to the Claims

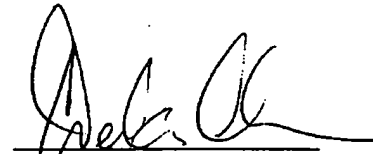
Clams 7-17 are objected to by the Examiner as being dependent upon a rejected base claim, but would be allowable if rewritten independent form to include all of the limitations of the base claim and any intervening claims. In response, Applicants have amended claim 7 and 16 to be independent claims which include all limitations of the base claim and any intervening claims. As for claims 8-15 and 17, these claims are directly or indirectly dependent on claim 7 or 16. Therefore, Applicants submit that the objection to claims 7-17 has been traversed.

Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance and the issuance of a formal Notice of Allowance at an early date is respectfully requested. Should the Examiner believe that a telephone conference would expedite prosecution of this application, please telephone the undersigned attorney at his number set out below.

Date: February 06, 2004

Respectfully submitted,

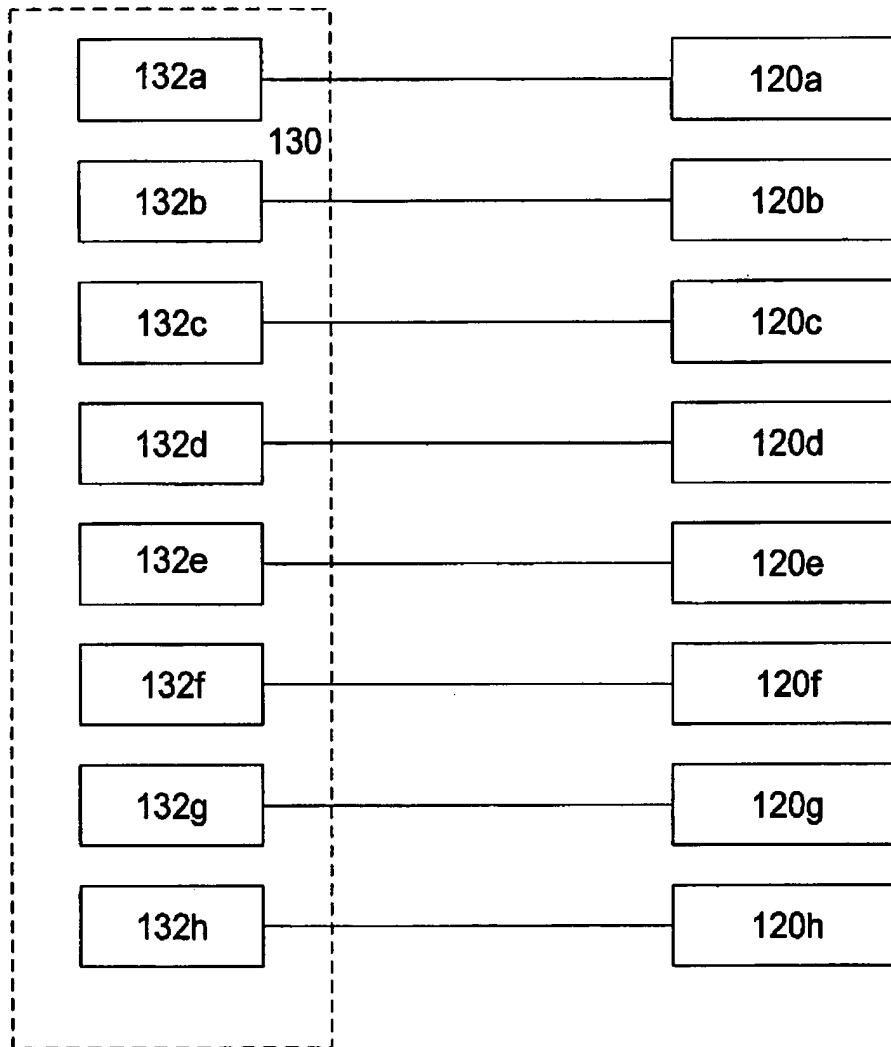


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Annotated Sheet Showing Changes



101

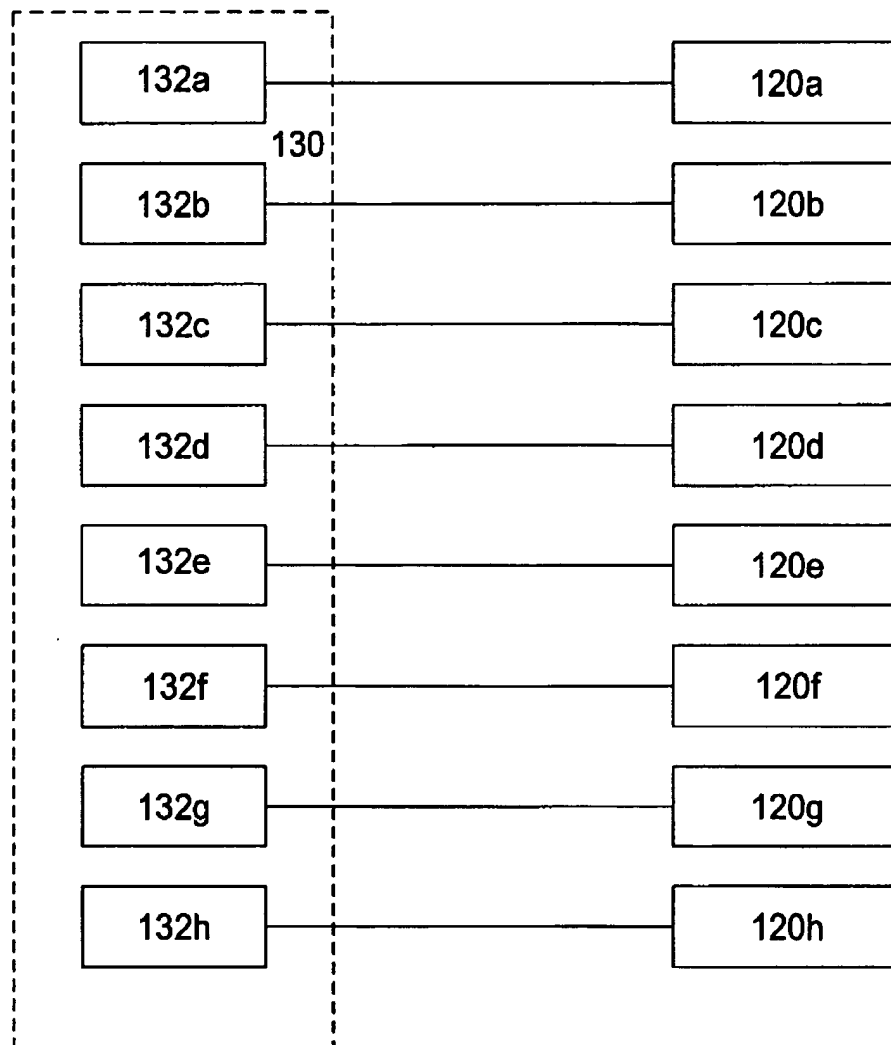
FIG 1

PRIOR ART

Legend "Prior Art" added

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Replacement Sheet



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FIG 1

PRIOR ART